

extent of reaction, ξ

Extensive quantity describing the progress of a chemical reaction equal to the number of chemical transformations, as indicated by the reaction equation on a molecular scale, divided by the Avogadro constant (it is essentially the amount of chemical transformations). The change in the extent of reaction is given by $d\xi = \frac{dn_{\mathbf{B}}}{\nu_{\mathbf{B}}}$, where $\nu_{\mathbf{B}}$ is the stoichiometric number of any reaction entity \mathbf{B} (reactant or product) and $dn_{\mathbf{B}}$ is the corresponding amount.

Source:

Green Book, 2nd ed., p. 43

PAC, 1996, 68, 149 (*A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)*) on page 165

PAC, 1996, 68, 957 (*Glossary of terms in quantities and units in Clinical Chemistry (IUPAC-IFCC Recommendations 1996)*) on page 973

PAC, 1992, 64, 1569 (*Quantities and units for metabolic processes as a function of time (IUPAC Recommendations 1992)*) on page 1572

PAC, 1993, 65, 2291 (*Nomenclature of kinetic methods of analysis (IUPAC Recommendations 1993)*) on page 2295